

# Comparisons of Job Characteristics

**Focus Occupation:** First-Line Supervisors of Mechanics, Installers, and Repairers (49-1011)

**Associated Occupation:** Mechanical Engineers (17-2141)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 63

**Focus Occupation:** First-Line Supervisors of Mechanics, Installers, and Repairers (49-1011)

**Associated Occupation:** Mechanical Engineers (17-2141)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Engineering and Technology	5.7	21.5	12.2	<<	Extensive education and/or training may be required
Design	5.2	21.0	9.1	<<	Extensive education and/or training may be required
Mathematics	9.2	18.1	13.4	<<	Extensive education and/or training may be required
Mechanical	6.8	18.1	19.8	0	Current knowledge level may be sufficient
Physics	4.3	15.3	6.7	<<	Extensive education and/or training may be required
Production and Processing	6.0	14.2	13.5	0	Current knowledge level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 9

**Focus Occupation:** First-Line Supervisors of Mechanics, Installers, and Repairers (49-1011)

**Associated Occupation:** Mechanical Engineers (17-2141)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Mathematics	6.2	15.3	8.8	<<	Extensive development of skills in this area may be required
Complex Problem Solving	9.1	14.8	11.0	<<	Extensive development of skills in this area may be required
Judgment and Decision Making	9.4	14.1	11.6	<	A higher skill level may be required
Science	4.5	13.6	4.8	<<	Extensive development of skills in this area may be required

Operations Analysis	5.0	13.0	7.1	<<	Extensive development of skills in this area may be required
Systems Evaluation	6.4	12.0	9.9	<	A higher skill level may be required
Technology Design	2.6	11.0	2.9	<<	Extensive development of skills in this area may be required
Programming	2.2	7.5	2.7	<<	Extensive development of skills in this area may be required
Installation	1.7	6.3	3.4	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 86			
Focus Occupation: First-Line Supervisors of Mechanics, Installers, and Repairers (49-1011) Associated Occupation: Mechanical Engineers (17-2141)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Deductive Reasoning	10.6	15.8	12.6	<<	Extensive improvement in abilities may be required
Written Comprehension	11.0	15.8	12.5	<<	Extensive improvement in abilities may be required
Mathematical Reasoning	6.3	15.7	9.4	<<	Extensive improvement in abilities may be required
Information Ordering	9.9	15.4	11.6	<<	Extensive improvement in abilities may be required
Near Vision	11.1	13.3	11.9	<	Some improvement in abilities may be required
Number Facility	6.3	13.0	8.8	<<	Extensive improvement in abilities may be required
Category Flexibility	9.0	12.7	10.6	<	Some improvement in abilities may be required
Visualization	7.5	12.7	10.4	<	Some improvement in abilities may be required
Selective Attention	8.7	11.0	9.3	<	Some improvement in abilities may be required
Perceptual Speed	7.4	10.6	9.4	<	Some improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 59	
Focus Occupation: First-Line Supervisors of Mechanics, Installers, and Repairers (49-1011) Associated Occupation: Mechanical Engineers (17-2141)			
Work Activities			Exclusivity of Activity

Confer with engineering, technical or manufacturing personnel	25
Develop policies, procedures, methods, or standards	21
Diagnose mechanical problems in machinery or equipment	65
Direct and coordinate activities of workers or staff	3
Prepare reports	8
Read blueprints	10
Read schematics	34
Read technical drawings	7

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Tools and Technologies that Both Occupations Have in Common

Similarity of Focus  
Occupation to Associated  
Occupation: 83

**Focus Occupation: First-Line Supervisors of Mechanics, Installers, and Repairers (49-1011)**  
**Associated Occupation: Mechanical Engineers (17-2141)**

Tools and Technologies	Exclusivity
Business function specific software	1
Computer printers	2
Computers	1
Content authoring and editing software	1
Data management and query software	1
Finance accounting and enterprise resource planning ERP software	2
Industry specific software	1
Integrated circuits	18

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.